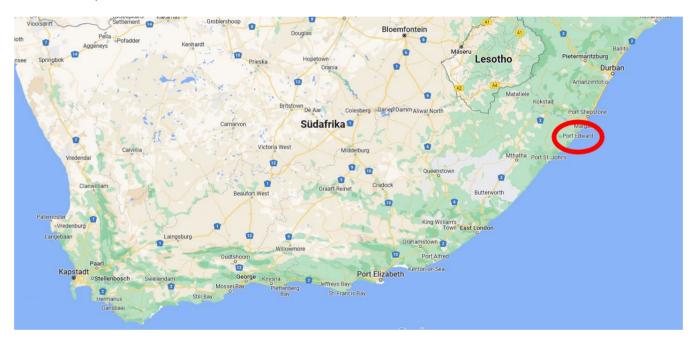
## dr Chetty's Covid Treatment Part 8

54-69 minutes

dr Philip McMillan: [00:01:12] Hello. Hello Shankara. Actually, you shouldn't be at the front, I should be, but since you started it, we can start right away with you. I extend a warm welcome to everyone present. With us is Dr. Shankara Chetty from South Africa. Look, [00:01:30] even if you weren't interested, I can tell you that this is probably going to be one of the most interesting conversations you can have with another doctor. So Shankara, tell us a little bit about yourself and where you stand in the world.

**dr ShankaraChetty:** [00:01:51] Good evening Philip and good evening to your viewers. I am a General Practitioner based in Port Edward, South Africa.



**DrMcMillan:** [00:02:00] Shankara, when you say Port Edward, here's an image I want to show people where you are in the world. So this is South Africa. Here we can see Cape Town. We can see Durban here. This is the center of South Africa. And you're - that's just Google Maps - there's Port Edward, that's the larger city that's closest to you, and then as we get closer you're right [00:02:30] down. You're beyond Port Johns, aren't you?

DrChetty: [00:02:33] No, about that.

DrMcMillan: [00:02:35] You are, you, ....

**DrChetty:** [00:02:37] Well, I'm a bit north.

**DrMcMillan:** [00:02:41] Yes. I see. Oh, there we have it. And right here is Port Edward, so you're pretty close to rural South Africa, aren't you?

DrChetty: [00:02:53] Yes. Yes I am.

**DrMcMillan:** [00:02:55] Mm-hmm. So yeah, so you worked in [00:03:00] South Africa for a few years, but you didn't study in South Africa. Why was that?

**DrChetty:** [00:03:09] Philip, I did my science education here. I studied genetics and advanced biology at the University of the Witwatersrand in South Africa. I added microbiology and biochemistry to my degree, but that was during apartheid when we had quota systems for entry into universities. [00:03:30] So I wanted to study medicine, but I couldn't get a place at the university because of the quota system. I had a friend who was studying at a college in India, he suggested I apply there and I was promptly accepted. And so I spent another seven years in India studying medicine at a college, a JSS Medical College, in a town called Mysore in southern India.

**DrMcMillan:** [00:03:58] Wow, wonderful. And [00:04:00] you came back to South Africa and have been practicing for over 20 years now?

DrChetty: [00:04:07] Yes, 20 years, actually I opened my practice in 2001 and this year is my 20th anniversary.

**Dr McMillan:** [00:04:13] Wow. Wonderful. Wonderful. Tell us a little bit about where you've been because that's very important when we talk about COVID 19. What area is this in Port Edward?

**DrChetty:** [00:04:29] Port Edward is a holiday destination. So I see a lot of foreign tourists. It is also a place where many South Africans are retiring. So I have a wide range of geriatric patients. I am also surrounded by many rural communities. And so I have quite a large proportion of poor patients who use my services. So I have a wide variety of [00:05:00] age groups, races and socioeconomic groups that I serve and I've kept my practice that way. I think this diversity allows me to have a certain passion for my work.

DrMcMillan: [00:05:12] Absolutely. And how far are you from the nearest major hospital?

**DrChetty:** [00:05:22] The nearest private hospital is about 35 kilometers away and the nearest [00:05:30] government facility is about 45 kilometers away.

**DrMcMillan:** [00:05:34] Wow,

DrChetty: [00:05:34] I have no other duties between us.

**Dr McMillan:** [00:05:39] Wow. That's interesting because it means that you and your patients don't have access to tertiary care facilities like ventilators or anything like that? Or do you have access to sufficient amounts of oxygen? [00:06:00]

**DrChetty:** [00:06:01] Ok, see. With the variety of patients I see, in South Africa we have a medical support system that some patients pay into and they can afford good medical care. I can refer these patients to hospitals that do blood tests. I can invest in their care. But a large proportion of patients come from rural communities that do not have access to such facilities. So [00:06:30] in my treatment, depending on the patient's means, I had to consider different ways to deal with it.

**DrMcMillan:** [00:06:39] Absolutely. So, OK, let's dig deeper into the topic of COVID, because you clearly have an interest in microbiology. What sparked your interest in COVID 19 before it became a global pandemic? How did you see it [00:07:00] when it hit China?

**DrChetty:**[00:07:03] Ok. Yes Philip, it's a passion of mine, nature in general. When I heard the news of this virus in Wuhan, I began to closely monitor how it was spreading and what information was being leaked out. But the Chinese were very reticent about research and information at the time, so I had to wait for that to spread out of China before relying on any published data [00:07:30]. When the virus came to Italy, I received more information about the nature of the disease, the symptoms that occurred, how quickly the disease developed and how the virus spread. That alone gave me the impression that we were missing something. And it seemed like the virus couldn't give us all kinds of pathologies, that we saw. So I think I had a healthy [00:08:00], I would call it intuition that something was wrong and needed further investigation.

**DrMcMillan:** [00:08:09] Hmm. So you've looked at this in detail. And before we get to what you do with your patients. What conclusion did you come to when you looked at how the disease presented to patients?

**DrChetty:**[00:08:28] Philip, I've seen many [00:08:30] cases of pneumonia. I have treated a lot of patients with respiratory diseases. A large proportion of my patients have severe COPD and lung diseases. Lots of heart patients, lots of comorbidities that I routinely treat in my practice. I see a lot of HIV and tuberculosis patients and things like that. So I am aware of the disease pathologies. And when I looked at the coronavirus, [00:09:00] it didn't make any sense. There have been people in whom the disease progressed very slowly and then completely regressed. There were people who

suddenly became ill and became seriously ill within a day or two. The age groups that were affected didn't make sense. The comorbidities did not appear to play a role in the disease. So I looked at that and thought we're definitely missing something here. And the only thing that could explain this diversity [00:09:30] of presentation would be an allergic reaction to something that depends on the patient and not the virus. So I had a suspicion that something was going on that needed further investigation and I looked at the research that was going on around the world at the time. Many studies have been conducted on hospitalized patients and other patients, but there have been no studies on the initial presentation [00:10:00] and course of this disease before the patient entered the hospital. So I thought we were doing this research far too far from the onset of the disease to be understood. At that time I decided

**DrMcMillan:** [00:10:23] And let me put that in context for folks. There is a reason why Shankara is so important here, because [00:10:30] They have treated over 4000 outpatients without any of them dying or going to the hospital.

DrChetty: [00:10:44] Yes, Philip, and as of now I don't have oxygen in my office. I've never found the need for it.

**DrMcMillan:**[00:10:53] Wow that's amazing so that's where the understanding you have [00:11:00] is of tremendous value to the rest of the world. And let me put some context again when we are talking about the treatment of COVID 19 and we are talking about the use of intravenous heparin or low molecular weight heparin. We're talking about people who are put on oxygen and put on a ventilator in the intensive care unit and we put them on their stomachs. The reality is that [00:11:30] the rest of the world outside of the first world doesn't have good access to these types of facilities. You just don't have it. And it almost seems like the first world, while coming out on top in terms of management and leadership of COVID 19,

**DrChetty:** [00:12:04] Yes, that is very true. Many of the drugs that have been touted for treating the coronavirus since its inception are unavailable to most of the world's population. And of course, if intravenous drugs need to be administered in the hospital, I can't use them. So I have to choose from the toolbox that's available to me [00:12:30] to make a difference.

**Dr McMillan:** [00:12:34] Wow. Ok, so if you, let's remind you again, whatever you're doing, it's working because, as you said, none of the 4000+ patients you've looked after have died or needed oxygen. And your strategy is primarily to catch them early, right?

**DrChetty:** [00:12:58] Yes, it is. And [00:13:00] Philip, I've looked at all the medications I use and the clinical benefit of each medication I've used is absolutely obvious. I've been forced to use clinical improvement as a measure of drug effectiveness, and every single patient I've had has shown improvement with every drug I've given them. There is an expectation [00:13:30] of some kind of improvement. Every patient was made aware of what I expect. And every patient showed significant improvement within a day or two of starting treatment. So I had no reason to question my treatment methods.

**Dr McMillan:** [00:13:48] Wow. And how did you deal with the issues of cross-infection and whatnot because you didn't have full PPE (Personal Protective Equipment) available? How did you deal with this kind of [00:14:00] problem?

DrChetty:[00:14:01] See, I have a broad knowledge of how respiratory viruses work, so I've decided to draw on my education rather than follow what comes out of research. There seems to be a lot of controversy. There seems to be a lot of confusion surrounding the virus. When I look at a respiratory virus, the two most important factors that prevent it from spreading are sunlight and ventilation, and of course [00:14:30] keeping my hands off my face and keeping patients apart. So my home is above my practice. I have a one-on-one practice, so not a large group of staff to support me. I have two nurses and that's all. The three of us had to find a way to deal with it. So I moved from home to protect my family and of course to isolate myself from the public eye because I was the most vulnerable person in the community. And [00:15:00] I pitched the tent in front of my house, a real A-frame tent with the consulting room in the screening area, and I marked my floors in practice with red stripes to keep people away. It creates an understanding that to stay between the red lines you need to keep your hands to yourself. So I took small measures to triage the patients at the entrance and separate them into COVID positive, suspects and those who were in my office for [00:15:30] other reasons, thus separating the patients. As for prevention, I wear a double mask. I put on a visor. I use the white lab coat to avoid touching everything around me. And that's how I saw my patients. In the entire year of caring for COVID patients I have never used full PPE (Personal Protective Equipment). Just made sure to carefully remove my smock once I'm done in my COVID tent. I disinfect my hands. I took off my [00:16:00] visor ready to see the patients who were not exposed or were there for other reasons. And so far I haven't had a single cross infection. In my practice, not a single patient has come back with COVID-like symptoms within a few days. I have never used full PPE (Personal Protective Equipment) in caring for COVID patients. Just made

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**DrMcMillan:** [00:16:16] This is absolutely incredible. Absolutely unbelievable. ok wow Ok, so now let's get down to business. What did you originally intend to use [00:16:30] and why? Given the limited resources, why did you choose what you wanted to use and why?

DrChetty:[00:16:39] Before Corona came to South Africa and from observing all the data coming in from the rest of the world, I had a suspicion that we were dealing with an allergic process. Being a doctor who dispenses medication, I had to stock up on medication [00:17:00] to prepare for this pandemic. So I looked at the different treatments for different allergies. I had to have antihistamines available. I needed to have a good supply of steroids on hand. Knowing the concerns of using a steroid for a viral illness, I needed to find out where it would provide the most benefit. At that time hydroxychloroquine was a hot topic worldwide and I looked at this drug, but more from an immunomodulatory point of view [00:17:30] than for its antiviral properties, because I was inclined to assume it was an allergic condition. Also, I had a hunch that the benefits we're seeing around the world may be due to its immunomodulatory rather than antiviral effects. This is also the reason why I chose ivermectin. Those were the two medications I chose that are not part of my routine treatment. Everyone treats a bee sting or an allergy, so we all know how to do it. So [00:18:00] I picked these two drugs to look at them purely from an immunomodulatory perspective and see if they have any benefit. because I was inclined to assume that it was an allergic disease. Also, I had a hunch that the benefits we're seeing around the world may be due to its immunomodulatory rather than antiviral effects. This is also the reason why I chose ivermectin. Those were the two medications I chose that are not part of my routine treatment. Everyone treats a bee sting or an allergy, so we all know how to do it. So [00:18:00] I picked these two drugs to look at them purely from an immunomodulatory perspective and see if they have any benefit, because I was inclined to assume that it was an allergic disease. Also, I had a hunch that the benefits we're seeing around the world may be due to its immunomodulatory rather than antiviral effects. This is also the reason why I chose ivermectin. Those were the two medications I chose that are not part of my routine treatment. Everyone treats a bee sting or an allergy, so we all know how to do it. So [00:18:00] I picked these two drugs to look at them purely from an immunomodulatory perspective and see if they have any benefit. that we observe worldwide are due to its immunomodulatory rather than antiviral effects. This is also the reason why I chose ivermectin. Those were the two medications I chose that are not part of my routine treatment. Everyone treats a bee sting or an allergy, so we all know how to do it. So [00:18:00] I picked these two drugs to look at them purely from an immunomodulatory perspective and see if they have any benefit, that we observe worldwide are due to its immunomodulatory rather than antiviral effects. This is also the reason why I chose ivermectin. Those were the two medications I chose that are not part of my routine treatment. Everyone treats a bee sting or an allergy, so we all know how to do it. So [00:18:00] I picked these two drugs to look at them purely from an immunomodulatory perspective and see if they have any benefit. Everyone treats a bee sting or an allergy, so we all know how to do it. So [00:18:00] I picked these two drugs to look at them purely from an immunomodulatory perspective and see if they have any benefit. Everyone treats a bee sting or an allergy, so we all know how to do it. So [00:18:00] I picked these two drugs to look at them purely from an immunomodulatory perspective and see if they have any benefit.

**DrMcMillan:** [00:18:08] And in relation to HCQ, when you saw all the studies from around the world that were either ambiguous or said there was no benefit? What made you believe it's worth doing?

**DrChetty:**[00:18:26] Hydroxychloroquine has long been used in [00:18:30] large groups of people struggling with viral diseases. Armies use it, soldiers going to war. I used this drug in South Africa to treat malaria so I know the effects and side effects and all the rest. So I wasn't worried that it might be risky to use. So I figured there was no reason not to try it. Very quickly I would be able to evaluate its effectiveness and [00:19:00] make a decision as to whether I should continue using it

or switch to something more effective. That's why I chose Hydroxychloroquine. But the thought process always revolved around its immunomodulatory benefits. I have many patients taking hydroxychloroquine to treat rheumatoid arthritis. And I know very well how we should treat these patients and how the dosage should be adjusted and all those things. So there were no concerns about the safety [00:19:30] of using this particular drug. So I decided to give it a try and see what comes out.

**DrMcMillan:** [00:19:37] So this is very, very interesting. What I'm trying to understand is that from a practical point of view, when patients start to feel unwell, it is common practice in most countries to stay at home. And then when it's necessary, when you get really short of breath, you go to the [00:20:00] hospital. What advice have you given your patients in the region?

DrChetty:[00:20:06] Ok. Look, when the World Health Organization put out protocols saying everyone has to isolate themselves, patients can't see their doctors in person, I had a crowd outside my office and they asked what was going to happen. And so I have assured all my patients that I will be there for them. So they were well aware that they [00:20:30] could get medical help in time. Very soon after the start of the pandemic, I realized the importance of the eighth day and the events of that day. The population was informed very quickly that you have to report flu-like symptoms immediately. So I've had a flood of patients with flu-like symptoms, that I had to assess and decide how to treat. So I [00:21:00] think my community has been very well educated from the start about not being afraid. After all, we are responsible for taking care of people's health, be it emotional or physical health. And I realized that the fear of the pandemic would lead to problems. So I had to reassure my patients, even if it would jeopardize my own existence. I'm passionate about what I do and that's why I think [00:21:30] I have to do what needs to be done. And that's how I made this available today, to take care of people's health, be it emotional or physical health. And I realized that the fear of the pandemic would lead to problems. So I had to reassure my patients, even if it would jeopardize my own existence. I'm passionate about what I do and that's why I think [00:21:30] I have to do what needs to be done. And that's how I made this available today, to take care of people's health, be it emotional or physical health. And I realized that the fear of the pandemic would lead to problems. So I had to reassure my patients, even if it would jeopardize my own existence. I'm passionate about what I do and that's why I think [00:21:30] I have to do what needs to be done. And that's how I made this available today.

**DrMcMillan:** [00:21:36] So your primary strategy was to have people come to you as soon as they felt unwell for thorough potential therapy. And how did you differentiate the COVID symptoms from, say, a typical flu or [00:22:00] something else? What have you done to differentiate

DrChetty: [00:22:05] Philip, from the start I've asked patients to come early. Not because I understood the benefit of early treatment, but because all I did, putting up a tent etc., was guided by a more academic interest in understanding the pathology from day one. So that was why I set up the tent to see how Covid develops. [00:22:30] The symptoms of the coronavirus and the flu are almost identical. They are clinically indistinguishable from one another for the first seven days. In South Africa there was initially a big push towards testing. Any patient who came in with symptoms was sent for a coronavirus test, so it was a little easier to find the ones that were positive and focus on them [00:23:00]. However, it quickly became clear that the test was not reliable and I saw cases that had tested negative but were actually positive. So it became more of a clinical endeavor. I asked because I knew we were dealing with an illness that causes severe dyspnea (shortness of breath). So I explained to each and every patient that if dyspnea occurs, they must contact me immediately [00:23:30] so that I can understand where this dyspnea is coming from and what it is and all the other symptoms associated with it, so that I understand what I'm dealing with with this shortness of breath, because I knew we were dealing with a disease that causes severe dyspnea (shortness of breath). So I explained to each and every patient that if dyspnea occurs, they must contact me immediately [00:23:30] so that I can understand where this dyspnea is coming from and what it is and all the other symptoms associated with it, so that I understand what I'm dealing with with this shortness of breath. because I knew we were dealing with a disease that causes severe dyspnea (shortness of breath). So I explained to each and every patient that if dyspnea occurs, they must contact me immediately [00:23:30] so that I can understand where this dyspnea is coming from and what it is and all the other symptoms associated with it, so that I understand what I'm dealing with with this shortness of breath.

**DrMcMillan:** [00:23:47] What you observed is what I was trying to find answers for. So that's perfect. So once the patient [00:24:00] started having symptoms, how long after did he start getting short of breath?

**DrChetty:** [00:24:08] Okay. That is the most important thing in this pandemic. The initial viral illness is something I treated in a typical way. Just as I would treat any other viral illness symptomatically, the patients were given an antihistamine for a runny nose and something to control their [00:24:30] temperature and an anti-inflammatory for the physical pain. And if they develop symptoms of a bacterial infection, they were given an appropriate antibiotic. But everyone has been made aware that symptoms must improve and that any worsening or change in symptoms should be reported immediately. But that was more of an academic endeavor for me to understand the disease. Then I found in the first. I think five patients who got shortness of breath, [00:25:00] the shortness of breath always came on exactly one week after the onset of the illness. I found that strange. I went back to my notes and looked closely at these five patients. Yes, I've had patients who were symptom-free for seven days, but these five patients presented exactly one week after their symptoms began. So I knew the allergic process was initiated on that eighth day, [00:25:30] a week later, and it happened almost to the hour. I've had patients who develop symptoms Monday night and Monday morning, a week later, called me and said, 'I'm fine, I need to be over it.' and I said. 'Please wait a few more days to make sure that you are fine. And inevitably they called me in the evening to tell me that they have body aches again. And there they were in the hypersensitive phase of that reaction. See, hypersensitivity was [00:26:00] a consideration, but never something I considered from the start. I knew I was dealing with an allergic process. What alerted me to the hypersensitivity was knowing to start steroids on day eight as that is the trigger for this allergic process. But I didn't understand the nature of this allergy and I knew it was a new process because I've had patients who had flu-like symptoms for a day and then [00:26:30] got better. They were fine for the next six days. I've had patients who were exercising and doing other things during this time but came back exactly a week later with sudden onset dyspnea, with saturation dropping to 70 percent within that day. That brought the understanding that we were dealing with something that took place on that eighth day. So I started treating it with steroids. 30] then improved. They were fine for the next six days. I've had patients who were exercising and doing other things during this time but came back exactly a week later with sudden onset dyspnea, with saturation dropping to 70 percent within that day. That brought the understanding that we were dealing with something that took place on that eighth day. So I started treating it with steroids. 30] then improved. They were fine for the next six days. I've had patients who were exercising and doing other things during this time but came back exactly a week later with sudden onset dyspnea, with saturation dropping to 70 percent within that day. That brought the understanding that we were dealing with something that took place on that eighth day. So I started treating it with steroids.

**DrMcMillan:**[00:26:57] So stay tuned. I just want to clarify something here because people listening may not know. So when you talked about hypersensitivity, maybe people didn't quite understand that from a medical perspective, there are four types of hypersensitivity. Yes, there is type one, which is nut allergy or... A typical nut allergy is a good example of where anaphylaxis occurs. Type two is an allergy where the body produces [00:27:30] antibodies that attack your cells. And in type three, the body forms complexes in the bloodstream. Type four is a cell-mediated disease in which the T cells attack the body. This is the tuberculosis response that the Mantoux tests we use produce. So there are four types but you've focused on the first type, the allergic type that we see in asthma or [00:28:00] hay fever, which occurs upon contact with the allergen. Sorry, carry on. Yes.

**DrChetty:** [00:28:08] Yes. When I saw this sudden change in symptoms on the eighth day, I started treating the patients with prednisone. We have few ways to do blood tests and clarify what you're actually seeing. So I have to use clinical [00:28:30] improvement as a measure of effectiveness. So I put steroids on the patients and found that it took two or three days for them to get better, and they all got better. And so I noticed that steroids seem to have the benefits that have been reported around the world, which is why I made steroids my first choice. And then there came a fateful patient with a saturation of 80, very young, [00:29:00] overweight, diabetic, and I knew I had to put her on a steroid. I looked at her and thought, if this is a type 1 hypersensitivity because it comes on so quickly, then maybe I need to **give a strong antihistamine like I would for a bee sting.** So I gave her a child's dose of promethazine for a day to see what would happen. I got my staff to watch almost every patient on a daily basis to see how they improved because of course [00:29:30] the clinical side of things was crucial for me, the fine tuning, like me treat her This particular patient was doing very well the next day. My co-workers were very excited and came up to me and said, 'Hey, she's fine', and I said, 'Just watch. I've only given her antihistamines for a day, and when the effects wear off she'll probably get shortness of breath again. And that's exactly what happened. But she got to us in time as soon as that happened and we gave her a dose of antihistamines and [00:30:00] she recovered immediately. Since then I have experienced many of these instant recoveries. And so I was made aware of a sudden allergic process.

**DrMcMillan:** [00:30:17] So you've found that once patients become short of breath, taking antihistamines, simple antihistamines, is beneficial.

DrChetty:[00:30:28] Yes, very useful. [00:30:30] If I may give an example, Philip, I have seen many patients over the phone. I'm from South Africa, so I have a lot of friends and family close by. I had a gentleman, a 54 year old gentleman who is diabetic and has high blood pressure and had a double stent placed two months prior. He's not my patient. He lives in my hometown and is friends with the family. His daughter called me to tell me he got [00:31:00] Covid. I explained to her the progression of the disease and said: "Next week Wednesday is the day he shows that kind of reaction. Please keep me posted. I have to react immediately." She got in touch on Friday, three or two days after the start of the second phase, and desperately asked me to to give her a prescription for oxygen. When I asked why, it turned out that her father had been suffering from shortness of breath since Wednesday, as I had predicted [00:31:30], and then by Thursday he had to rely on supplemental oxygen. He had spent Thursday night on the oxygen machine and was unable to remove the mask as his levels continued to drop. They were prepared with a pulse oximeter and the rest. On Friday morning she ran out of oxygen and frantically called me. So I sent her a prescription to say, "Listen, I don't see the need for oxygen. I am sending him a prescription for an immediate dose of 12 prednisone and [00:32:00] 25 mg promethazine for further treatment. When she got to him at noon, his cardiologist had already arranged a hospital bed for him. He sat with his bags packed and pondered his fate, because when patients come into the hospital they never see their families again unless they come out healthy, and his daughter had come with that handful of pills. He took her. The next morning, it was Saturday morning, I called to see how he was doing. He [00:32:30] had not needed the oxygen during the evening and within an hour or two of taking the medication he had shown improvement. He made it through the night without oxygen so I got his phone number from his daughter. On Sunday morning I called again to see if the improvement was continuing and his wife said

Dr McMillan: [00:32:54] Wow.

**DrChetty:**[00:32:54] So I couldn't ignore that. The reason I'm here today is [00:33:00] not because I was doing research in that area or anything. The progress I have seen in my patients has been remarkable. We couldn't ignore that. My coworkers and some pastors in the area I had treated compelled me to provide this information, so I wrote an article and submitted it to Modern Medicine. I was well aware of the far-reaching controls by authorities [00:33:30] and the pharmaceutical industry and the entire administration. The last person I wanted to hear about my findings was the World Health Organization because at the time they were causing more controversy than solving. So I sent it to every doctor I could think of. I sent it to my principal at my college in India where I had studied. I put it in the doctors chat groups that I am a part of and I immediately had a great reaction [00:34:00] from everyone. Only in South Africa have I experienced total silence.

**DrMcMillan:** [00:34:07] Mm-hmm.

**DrChetty:** [00:34:08] And then I discussed it with doctors around the world and looked at the pathogenesis. And I had to carry on as I had done. At that point, there were 200 patients in the first wave. So we had a big second wave, which caused the numbers to go up drastically.

**DrMcMillan:** [00:34:25] So there's one question that keeps coming up and I think we should address that [00:34:30] and that's it. Do you recommend ivermectin? And as soon as I said that, someone else says no ivermectin, that's no use. Any thoughts from your experience?

**DrChetty:** [00:34:45] Okay. Ivermectin has a very unique way of working in this pandemic. Many people are interested in its virucidal property, but when you look at in vitro studies, the [00:35:00] dosage of ivermectin required to inhibit the virus is toxic to humans. When I looked at ivermectin early in the pandemic, I looked at it from an immunomodulatory perspective. So I saw no need to use it in the early stages of the pandemic. I managed to get 20 tablets from a friend overseas so I knew I could use them and make sure I understood their benefits. So I started using it on patients who came [00:35:30] with dyspnea. There's a reason I did this. Ivermectin is an antiparasitic. Contrary to the people who think it is a veterinary medicine, it is used in the treatment of fialariasis (river blindness) in humans and is one of the most important means of treating fialariasis. The reason for this is that when treating Fialaria we use the...

**DrMcMillan:** [00:35:53] Worm infestation, right? Excuse.

**DrChetty:** [00:35:56] And that was the controversy about us using an anthelmintic to treat a [00:36:00] virus. In the treatment of fialariosis, the remnants of the dead worms or parasites that remain in the lungs trigger a severe hypersensitivity reaction in the lungs. It manifests itself in a sudden onset of dyspnea that progressively worsens. For years, research has been conducted into the treatment of fialariasis and it has been found that drugs such as ivermectin are very efficient at clearing the eosinophils from the lungs [00:36:30] and so have become the mainstay in the treatment of fialariasis. So I used ivermectin because it can remove eosinophils from an allergic lung, because I thought that this virus caused an allergic reaction in the lungs. It might not even have been in the lungs. The point of entry may have been far [00:37:00] away, but it triggered an allergic process in the lungs. Whether you're stung in the butt or chest by a bee, your lips will swell. We don't look for the bee sting on the lips. So I knew that I was dealing with a pathology in the lungs and that it was an allergic process. As a result, I delved into medications such as diethylcarbamazine citrate. Diethycarbamazine is a drug primarily used to treat fialaria and it has greater potential [00:37:30] in clearing eosinophils from the lungs. It's just not available in the country I live in. So I could not investigate whether this type of medication has a greater benefit for me. However, in studies treating Fialaria, it has been shown to eliminate eosinophilia in the lungs within 24 hours. So my next step was to try and convince the world that this is pulmonary hypersensitivity pneumonitis, [00:38:00] and not viral pneumonia. Well, viral pneumonia can't be cured in a day and diethylcarbamazine citrate could have been my salvation.

**DrMcMillan:** [00:38:11] And here's a question. Someone asked: "Have all your patients made a full recovery and are there any cases of Long-COVID?"

**DrChetty:** [00:38:21] Okay, I need to develop a breakdown of my clientele to answer that question. Every patient who presented in those first [00:38:30] seven days and was informed of the hypersensitivity reaction on day eight and presented promptly for treatment, which is the majority of treated patients, recovered in a timely manner and had no long-term consequences. I have never had a case of Long-COVID. I also haven't had a case of recurrence of COVID sequelae after a few months. I haven't had diabetes. Yes, [00:39:00] I have had patients who were severely ill, who took a while to recover, and who had lung damage from this disease that presented and then had to be checked. But I have never had a patient make a full recovery and then come back with new symptoms.

**Dr McMillan:** [00:39:20] Wow. So that's huge, you know, and that's why I'm saying that what you've been talking about here is so important [00:39:30] for the world to hear because what you're doing is working whether people agree with how you do it or not. Ultimately, as a clinician, I say, if patients are better, I don't care what you do as long as they are better, and that's what you do. So the question is, what do you think when you've treated four thousand patients, none of whom have died, [00:40:00] none of whom have needed oxygen. Would you vaccinate them?

**DrChetty:** [00:40:06] I'm in a unique position, none of my patients have died, none of them have had any long-term side effects from COVID. So I think a vaccine vendor has some lofty goals to achieve, even a single death or side effect is one too many for my [00:40:30] clientele. So I would say that vaccination has its merits. If used properly, it could prevent us from contracting the coronavirus. But as long as there are any deaths or side effects from the vaccine, I think my treatment has stood the test of time much better than the vaccine.

**DrMcMillan:** [00:40:54] Then how come you don't get more attention for this work [00:41:00]? Why is that? I mean, I figure you were recommended to me by someone else. Why isn't this work getting the attention it should be getting?

**DrChetty:**[00:41:17] See, but I think I would put it down to the way medicine is taught around the world, not my opinion. There are countries where medicine is heavily regulated [00:41:30] and where people are taught to follow protocols and think outside the box. Therefore, they have to wait patiently for the relevant authorities to draw up protocols before treating anyone. In India we are taught to think outside the box and to try anything. Tests are few and any supportive services that could help us diagnose are unavailable. So we were taught to diagnose the patient based on our clinical ability and just [00:42:00] to carry out further diagnostic tests to confirm or clarify our diagnosis. Never use tests to make a diagnosis. I treat patients, not test results. So I have to use my clinical skills to treat all these patients and I think that plays a very big part in how we respond to our clients. I think a lot of it has to do with arrogance and snobbery as well. It's [00:42:30] difficult to convince someone of something when they're as withdrawn as they are in the way they treat people. Many patients have told me, "You appear to have reduced the mortality and morbidity associated with the coronavirus, but unfortunately you may have impacted profitability as well." And I believe,

DrMcMillan: [00:42:55] Oh, absolutely right.

DrChetty: [00:42:57] One in my opinion...

**DrMcMillan:** [00:43:00] Yes.

Pop-up question from a listener:

Do these patients also receive prednisone? Would these patients have improved without the therapy? (Is there any randomized controlled trial) Yes, I understand the challenges of this format, but as it is an experimental tool it could be explored further.

So here is a question and comment about your patients who have received prednisone. And I think they differentiate between dexamethasone, which was used at Oxford, and prednisolone, which you've decided to use. And do you think these patients would have been better off without your therapy and randomized controlled trials? In fact, that's the viewpoint of most of the medical world if you haven't done a randomized controlled trial. Does that have any meaning [00:43:30]?

**DrChetty:**[00:43:33] As I said, this was never intended to be a randomized controlled trial, and as far as I'm concerned, randomized controlled trials are unethical in a pandemic. But you see, I have a very good understanding of what good clinical practice actually is. A few years ago I was asked to work at a center for research excellence to conduct phase two clinical trials [00:44:00] on drugs being developed by pharmaceutical companies. So I have met all the requirements to understand what good clinical practice is when conducting clinical trials. I also know what was negotiated in Nuremberg and Helsinki and why these things are very important. Unfortunately I never signed the contract because I can't watch [00:44:30] how the placebo group collapses and I have to document that without starting treatment for them. So I didn't participate, but I know very well what it takes to conduct a clinical trial. Now when it comes to whether I'm sure the medication worked or not, there are two ways I can judge. One of them was good clinical improvement. I had a patient [00:45:00] who had been getting progressively worse over the past few days, so I initiated treatment and checked each individual patient the next day to see if there was any improvement. It was more about adjusting the steroid dose so that I get a good clinical recovery very quickly, so as not to prolong the patient's agony and prevent him from going into a cytokine storm [00:45:30]. The trial is therefore not a randomized controlled trial. I treat patients and I need to keep their symptoms improving. So I came to the realization that the symptoms of this disease changed on the eighth day. No test, no randomized controlled trial would have found that out.

**DrMcMillan:** [00:45:59] Absolutely. So let me just say what people want to know and understand. The reality is there are medical professionals listening to this conversation, so I'll give you some examples. Ok, so the first patient is coming over. Let's say a twenty-five year old has had flu-like symptoms for a week when he first comes to you, and he has a minor flu-like illness. Do you think it's a coronavirus? [00:46:30] Are you giving him anything?

**DrChetty:**[00:46:33] I treat the first seven days like a viral disease. Well, all patients who come after these seven days have to be questioned about the course of the symptoms. Well, almost every patient who was symptomatic in the first seven days reported clinical improvement on the sixth and seventh days. I think [00:47:00] that we don't need to delve into all the semantics of recovery. We all know when we feel uncomfortable and tend to lose appetite, get aches and the like. And we all know very well when we feel better and have an appetite again and the worst is behind us. And that was found in every patient [00:47:30] no later than the sixth or seventh day. Some patients recovered within a day, but most,

**DrMcMillan:** [00:47:47] Absolutely. (unfortunately speaks while Dr. Chetty continues)

**DrChetty:**[00:47:49] [indistinct: "or even died at home"??] .. at home it became a very sad thing because when this information became known in my community, the patients realized [00:48: 00] on the importance of introducing yourself early. It seems the less educated got it better because they didn't give the pharmacy and their limited clinical understanding of the disease a chance with over-the-counter drugs and didn't come to me until the sixth day when they were feeling very bad and they guessed what would happen on the eighth day. So I had a lot of patients who came to me on the first and second day and understood that this was [00:48:30] very necessary. Now, when I enlighten them as to what would happen on day eight, I recorded for them exactly on what day they would experience certain symptoms if they were allergic. I educated them on these symptoms and advised them not to take them lightly, even if it was a single, very mild symptom. When I explained this to them, they already had family members who had died from this disease and [00:49:00] it sounded so true that I had patients crying because that was exactly what happened with the family member who had died had

happened. They thought he was getting better, but a week later he was in the hospital in critical condition and died. When I explained this to them, they already had family members who had died from this disease and [00:49:00] it sounded so true that I had patients crying because that was exactly what happened with the family member who had died had happened. They thought he was getting better, but a week later he was in the hospital in critical condition and died. When I explained this to them, they already had family members who had died from this disease and [00:49:00] it sounded so true that I had patients crying because that was exactly what happened with the family member who had died had happened. They thought he was getting better, but a week later he was in the hospital in critical condition and died.

DrMcMillan: [00:49:18] Ok, so the patient

DrChetty: [00:49:20] .... default,

**DrMcMillan:** [00:49:21] So the patient now? Ok, so the patient had the first symptoms. You saw him, you gave him some general advice. They tell him, [00:49:30] They warn him to come back immediately if he gets short of breath. OK?

DrChetty: [00:49:36] Yes.

DrMcMillan: [00:49:37] If you see him on this eighth day and he's short of breath. What are you giving him?

**DrChetty:** [00:49:43] On day eight, I'll start by saying we're dealing with a hypersensitivity reaction. My treatment therefore follows this basis. I am on prednisone, an appropriate dose of prednisone to [00:50:00] stop the reaction.

**DrMcMillan:** [00:50:01] Not dexamethasone.

**DrChetty:**[00:50:33] No, I have never used dexamethasone. This is an intravenous drug. I don't have the means to administer it to patients so I used methylprednisolone. The dosage has changed from the first variant we saw and that is why I think the South African variant, the second variant, is a bit more allergenic. It took me a week or two to realize that the steroid dosage needed to be increased drastically for the second [00:50:30] wave. But the beginning of treatment is a combination of methylprednisolone and an antihistamine. The dosage I have found for the South African variant by treating many people averages around 80 milligrams per day, which means 16 five milligram prednisone tablets to start with. In these severe reactions, promethazine was the drug of choice because it is a very potent histamine-type [00:51:00] inhibitor. However, levocetirizine also proved useful. I gave it to the patients who came in with shortness of breath at a dosage of 5 mg twice a day. Many patients in this second wave presented with gastrointestinal symptoms. I believe that altering the spike protein in the South African variant caused the virus to have greater affinity for the ACE2 receptors in the gut. So I've had [00:51:30] many patients who initially presented with gastrointestinal symptoms that only resolved with the use of H2 histamine blockers. They have cimetidine and famotidine and these types of drugs. PPIs (proton pump inhibitors?), antibiotics and antivirals showed no benefit at all. The only thing that got rid of those kinds of symptoms after seven days was the prednisone and the antihistamines.

DrMcMillan: [00:51:59] And where did you use your HCQ or your ivermevctin in this group?

**DrChetty:** [00:52:06] Well I tested ivermectin in the first wave. I gave it to the patients at the beginning of the illness, in the first five days. Ivermectin is known to have anti-inflammatory effects, so patients in the first wave showed improvement in their symptoms. Very few patients who received hydroxychloroquine progressed to the second [00:52:30] part of the disease so I felt it needed to be started early because the patients who gave me on the fourth or fifth day presented went into the hypersensitivity phase despite the use of ivermectin. Only those that we started treatment on day one or two didn't seem to respond. I have not had this reaction in any of my patients receiving hydroxychloroquine, but I have not used hydroxychloroquine extensively. I've had a few patients that I've tried it on and a few that I haven't tried it on so I could [00:53:00] get a good understanding of its effectiveness. We call this a control group, even if they were treated with other drugs. That's where I saw the benefit, but hydroxychloroquine isn't the magic bullet we thought it was. Neither is ivermectin alone. It won't save lives. You must have a thorough understanding of what you are trying to achieve so that you can use the right treatment at the right dose [00:53:30] at the right time. This is not a bacterial infection where we can write a prescription for five days of antibiotics to get the patient well. Viral disease, like most viral diseases, has a finite period of infection, and like chickenpox, it progresses through the process. You get flu-like symptoms, a headache, and a fever, but you don't have smallpox yet. Then after a few days a few patches form on the body and then they become [00:54:00] pustules and finally the last pustules dry up and the disease is over. So the treatment on the first day is very different from

the treatment on the last day. Therefore, knowing where you are in the development of the disease is crucial to determine the type of treatment you need to use.

**DrMcMillan:** [00:54:20] Absolutely, great, great. Listen, I'm going to ask you one more question before we wrap up. What is [00:54:30] your position on vitamin D?

DrChetty: [00:54:36] Initially, I advised many people to take the supplements that were touted as prevention against the coronavirus. Very quickly it became clear that there were far more effective medications to treat it, making the supplemental medication [00:55:00] secondary. They didn't show the remarkable benefit I saw with conventional treatment. From an affordability standpoint. I couldn't ask a rural patient to invest in vitamin D, vitamin D, and zinc and thereby lose the financial means to seek treatment when they fell ill. It is the same with the PCR tests. I couldn't help patients [00:55: 30] Wasting money on a PCR test and then having no funds to treat the disease if the test came back positive. The diagnosis of the disease was thus largely based on clinical findings. Worsening by day eight, that was the group of patients I started testing, not before. If you were sick with Corona for seven days and your condition had improved without consequences on the 10th [00:56:00] day of illness, you could be released into society, whether it was Corona viruses or not. The only reason I did the test on day eight, when the symptoms were clearly getting worse, was to convince the research community that it was coronavirus. The diagnosis of the disease was thus largely based on clinical findings. Worsening by day eight, that was the group of patients I started testing, not before. If you were sick with Corona for seven days and your condition had improved without consequences on the 10th [00:56:00] day of illness, you could be released into society, whether it was Corona viruses or not. The only reason I did the test on day eight, when the symptoms were clearly getting worse, was to convince the research community that it was coronavirus. The diagnosis of the disease was thus largely based on clinical findings. Worsening by day eight, that was the group of patients I started testing, not before. If you were sick with Corona for seven days and your condition had improved without consequences on the 10th [00:56:00] day of illness, you could be released into society, whether it was Corona viruses or not. The only reason I did the test on day eight, when the symptoms were clearly getting worse, was to convince the research community that it was coronavirus. If you were sick with Corona for seven days and your condition had improved without consequences on the 10th [00:56:00] day of illness, you could be released into society, whether it was Corona viruses or not. The only reason I did the test on day eight, when the symptoms were clearly getting worse, was to convince the research community that it was coronavirus. If you were sick with Corona for seven days and your condition had improved without consequences on the 10th [00:56:00] day of illness, you could be released into society, whether it was Corona viruses or not. The only reason I did the test on day eight, when the symptoms were clearly getting worse, was to convince the research community that it was coronavirus.

DrMcMillan: [00:56:25] Absolutely.

DrChetty:[00:56:50] Philip, I've been in consultation with my friends in India for a few days now and looking at the second wave of the disease and what to expect and how to [00:57:00] deal with it. The eighth day is still crucial. From what I've heard, the patients are getting sick and still showing worsening on the eighth day. From my practice, I know that the most important thing to save patients' lives is to educate them about day eight and the severity of the consequences that can follow. [00:57:30] The preparation for this day went so far that I gave the patients a pre- and post-dated prescription. Being closed at the weekend I was not able to treat a patient, which I predicted would get worse on a Sunday morning. I found them in my office Monday morning at 60 percent saturation and hospitalized, so I had to find a way [00:58:00] to get to them much faster so I could buy them time to go to the medical to get supply. So I printed out a prescription for prednisone 80mg a day for a week because I didn't know how soon they could get me for promethazine 25mg tid and for those who could afford it I added montelukast and or one Salbutamol syrup to help those who were [00:58:30] asthmatics or had that type of predisposition. so I had to find a way [00:58:00] to get to them much quicker so I could buy them time to get to medical supplies. So I printed out a prescription for prednisone 80mg a day for a week because I didn't know how soon they could get me for promethazine 25mg tid and for those who could afford it I added montelukast and or one Salbutamol syrup to help those who were [00:58:30] asthmatics or had that type of predisposition. so I had to find a way [00:58:00] to get to them much quicker so I could buy them time to get to medical supplies. So I printed out a prescription for prednisone 80mg a day for a week because I didn't know how soon they could get me for promethazine 25mg tid and for those who could afford it I added montelukast and or one Salbutamol syrup to help those who were [00:58:30] asthmatics or had that type of predisposition.

**DrChetty:**[00:58:33] This prescription had a sticker on it that said not to take this medication beforehand. I wrote in red the day the allergic reaction was to be expected and underneath it said "and only if your symptoms worsen". So they started

taking my medication for the first seven days, but were very alert to the onset of symptoms on the eighth day. Now dyspnea sometimes appeared a little later than the eighth day [00:59:00]. So physical pain, the onset of tiredness to the point where you want to sleep all the time, or dyspnea were three symptoms that I think heralded the onset of the allergic phase on day eight. So I instructed the patients that if they notice a significant difference from the previous day and notice these symptoms,

**DrMcMillan:** [00:59:41] Wonderful. What a wonderful..

**DrChetty:**[00:59:43] as soon as the patients get a problem. In India, informing the rural population is difficult, but not impossible in my opinion. In my church, it quickly became clear how important the eighth [01:00:00] day is. Some pastors in my area have contracted the coronavirus and have been treated by me, prompting them to recommend that their congregations pay attention to this eighth day. I heard even the most illiterate... waiting for me talking to patients outside about the meaning of this eighth day. So it's not an impossible task. We don't need an education to understand them. We have a healthy dose of fear that makes people broaden their horizons to [01:00:30] protect their lives. So I think the most important thing is to educate people about what is going to happen. The treatment is pretty simple.

DrMcMillan: [01:00:41] Absolutely.

**DrChetty:**[01:00:42] I don't have any patients that require oxygen. Each patient got better within a day or two. None of my patients even came close to considering hospitalization. And the two or three deaths I've had were patients [01:01:00] whose families, out of concern for them, asked that they be referred to a hospital in the hope that they would understand better and would be treated. But unfortunately I'm not allowed to outvote anyone. And no longer under my care, they steadily deteriorated, causing many psychiatric problems and guilt in the family members who became patients themselves and survived: I have patients [01:01:30] who are far more seriously ill than their parents,

DrMcMillan: [01:01:46] Yes. Yes. Yes.

**DrChetty:** [01:01:47] I think we need to revisit where we started. If the doctor at the hospital doesn't know you've been stung by a bee, we've got a problem.

**DrMcMillan:** [01:01:56] Yes,

DrChetty: [01:01:58] Wait until a few days after the bee sting and [01:02:00] you will have multisystem glitches.

Displayed comment from LinkedIn user:

I look forward to the day when Dr. chetty dr tedors aht replaces WHO!?

**DrMcMillan:** [01:02:02] Listen, I think that probably says just that - which is looking forward to the day you take over the running of the WHO. I mean, they still have... Some of the things you said here were just incredible. Really, really interesting. Thank you Vivian.

Superimposed comment from Vivian RF Linssen:

A very interesting discussion that needs to be expanded worldwide. We must act globally. My compliment. viv

Thank you also Sanja

Superimposed commentary by Sanja Jovanovic, MD, MSc

Exemplary clinical understanding and judgment!

I didn't necessarily get all the points and you can't see them, but I can see a lot [01:02:30] of a lot of them. This is an incredible discussion. I really liked what you said and I think this really needs to be emphasized because especially in countries that don't have access to quality and clinical care and from what you say they are without quality care is almost better off, and they are better off with very simple work. If there is a [01:03:00] way from here, Shankara, then remember the eighth day. That seems like an incredible piece of the puzzle.

**DrChetty:** [01:03:11] Once you're sick, I teach my patients that the day you get a sore throat doesn't matter, but put a cross on your calendar eight days later and make sure that there are no new symptoms that day. So we don't have to send everyone for a coronavirus test. You can isolate yourself and be a responsible citizen. And if nothing happens on the eighth day, [01:03:30] you can go out into the world again in a day or two.

**DrMcMillan:** [01:03:34] Wonderful, wonderful. Hold the line for me. Shankara, we're coming to the end now. Thank you all for listening. This was truly a fascinating conversation. And I look forward to bringing you more conversations of this nature in the future. Have a nice day.

DrChetty: [01:03:52] Thank you Philip.

end of translation